

The February issue of PROFILE features an article on Marine Corps First Navigators, the only enlisted navigators in the armed forces. Other stories included are Army Audiovisual Specialists, the Coast Guard's Surface Effect Ships Division, and Navy Torpedoman's Mates.



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# Profile

a guide to military careers Vol. 28 No. 2 December 1984

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## About the covers

**Front:** A 25th Infantry division soldier struggles across a one-rope bridge. This crossing is part of the extensive training the Air Assault School students will master before earning their "wings." (photo by Edward Pena)

**Back:** Petty Officer 2nd Class J. D. McBroom, a small arms range instructor at the Coast Guard Reserve Training Center in Yorktown, Va., demonstrates the proper stance for firing the 12 gauge shotgun.

# Air Assault, Sir!

story by Jay Field  
photos by Edward Pena

Jungle underbrush, steep and slippery cliffs, and narrow tunnels waist-high with water and pools of mud obstruct the paths of those attempting the 25th Infantry Division's air assault school. Nestled in the Koolau mountain range, it is just 40-minutes away from the "sands of paradise" at Waikiki. But, paradise seems a far reach to servicemen attending the 10-day course, where mud is the uniform of the day.

Caked on faces, lingering in trouser pockets, and clinging to bootlaces, the mud makes a tough day of soldiering even tougher.

Over 2,000 students have earned the air assault badge since the site changed from a recondo to air assault school in 1980.

Continuously, Army, Air Force, Navy and Marine members train here. Before attending the Air Assault School, they must pass three preliminary tests: an airborne physical training test (a two mile run in combat boots within 16 minutes, 45 push-ups, and 45 sit-ups), a 12-mile road march to be completed in three hours, and a challenging confidence course. Only after passing these obstacles will students face the rigorous ten days of air assault training.

Those who qualify and subsequently earn the air assault badge can claim a unique relationship between foot soldier and aircraft. They can rappel from helicopters or sling-load equipment for airlift. They can guide helicopters carrying vital supplies to remote areas. They possess the knowledge to move injured comrades over rugged terrain to medical help, and set up landing and drop zones for helicopters.

The first five training days cover rappelling and sling-loading operations. Students learn rappelling knot-tying techniques and rappel from a 35-foot tower. The third day soldiers rappel from a UH-1H "Huey" helicopter hovering at 12-feet, during both day and night exercises.

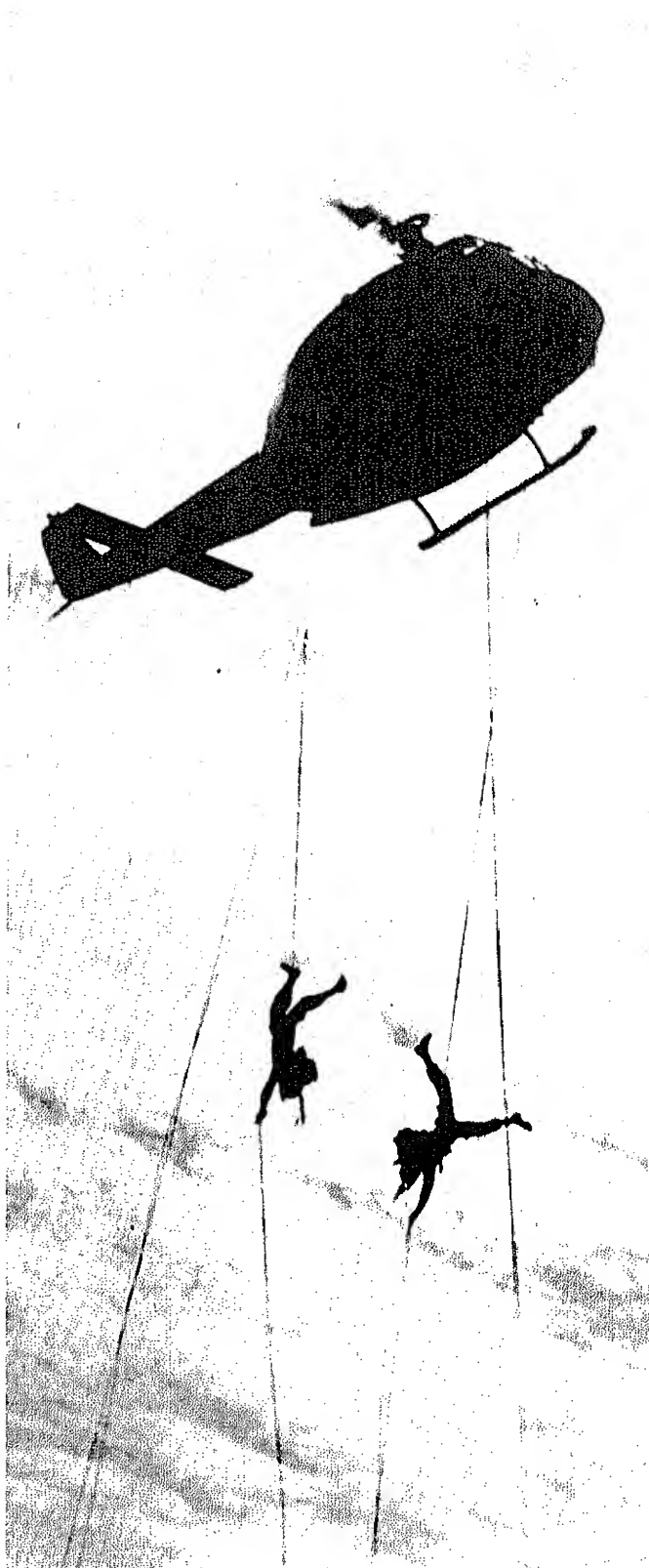
While sling loading, students prepare equipment and cargo for airlift by Huey and CH-47 "Chinook" helicopters. Soldiers guide choppers in, attach equipment, then signal 'all clear for take off.'

The "Air Assault Mile" follows. This training day involves competition between four squads. Ten to 18 person teams race the clock and each other through a gruelling, natural, obstacle course.

The scenario includes rappelling down a cliff while carrying a soldier in a makeshift stretcher, maneuvering through two darkened tunnels often filled with waist-deep water, crossing a pool of mud and a one-rope bridge and plunging into a muddy pond before scaling a cliff. By the end of the sixth day, fatigue penetrates the muscles. Like the mud, it's just part of the uniform of the day.

Pathfinder operations conclude the training. The pathfinder, who performs a vital role in air mobile operations, designates and prepares combat landing and drop zones, plus he communicates with and directs aircraft. Students learn

**(Right) Getting down Aussie style. Two air assault instructors with full packs demonstrate the Australian rappelling style—head first.**



medical evacuation procedures, how to rig a field-expedient poncho-parachute used to drop supplies, and tactical and non-tactical air mobile operations areas' movement.

The day before graduation, soldiers apply what they've learned in the "Combat Air Assault." This day-long operation involves marching many miles, rappelling from several helicopters and other air mobile exercises which test the students' air assault capabilities.

For many, this is the toughest soldiering they will ever encounter. Spec. 4 Timothy Malcomb, Battery B, 2nd Battalion, 11th Field Artillery, 25th Infantry Division claimed, "It was the longest two weeks of my life. Basic training doesn't have anything on this. It was tough!"

Graduation is unique. One-by-one, soldiers rappel down a 35-foot tower to receive the Air Assault Badge.

Capt. Richard Jaynes, a recent course graduate, explained, "I spent eight years in college, and earned three degrees. But now, my air assault wings mean just as much to me, if not more. Earning them was tough."

Air assault—a fast-paced course designed to test and challenge the students, both mentally and physically. The 25th Infantry Division Air Assault School reinforces teamwork, self-confidence and esprit de corps, making it one of the most exacting training schools the Army has.



(Above) Fighting the elements of mother nature, this air assault student strains to pull himself across a pool of mud in order to continue the mission of completing the Air Assault Mile. (Below) Air assault students run through the rigorous obstacle course with a "wounded" classmate tied to a litter.





# newsbriefs

## Coast Guard Academy applications

The U.S. Coast Guard Academy is now accepting applications for appointment to its class of 1989.

No congressional involvement or geographical quotas figure in appointments to the Coast Guard Academy.

Interested men and women assured of high school graduation by June 30, 1985, may get in touch with: Director of Admissions, U.S. Coast Guard Academy, New London, Conn.

Candidates must take either the College Board Scholastic Aptitude Test (SAT) or American College Testing Assessment (ACT).

High school records and leadership potential are also considered by the academy in selecting cadets.

## Early Promotion to E-2

Outstanding Army basic training graduates can look forward to early promotion to Private 2 (E-2).

Training center commanders can promote up to three percent of basic training trainees in their eighth week of training. Commanders can grant these promotions without regard to the normal six months time-in-service required for promotion from Private 1 (E-1) to Private 2.

The early promotions are for truly outstanding soldiers who demonstrate leadership potential, motivation, teamwork, and a positive attitude. This policy applies to active Army as well as Reserve component soldiers.

## Army tests new truck

A new cargo truck being tested by the Army will be able to haul a wide variety of cargo including both an artillery piece and its ammunition, fuel and cargo containers, or another truck and standard shelters.

The Palletized Load System truck weighs 12 tons and can carry 15 tons. In addition, its trailer can transport 15 tons, for a combined total of 30 tons.

The PLS's flatrack, or truck body, is transferred to its trailer or the ground by a hydraulic arm, allowing it to be self-loading and unloading. A single person in the vehicle's cab can operate it. Also, when mired in mud up to their ankles, PLS operators can down-load flatracks, use them to push the trucks free, then reload the flatrack.

## 1985 Dependent Scholarship Program

College-age dependent children of active duty, retired and former Navy, Marine Corps and Coast Guard personnel may be eligible for the 1985 Dependent's Scholarship Program.

A dependent child is considered to be unmarried and under age 21, or under age 23 if enrolled in a full-time course of study at an approved institution of higher learning.

Applications, transcript requests and scholarship pamphlets are available from the Naval Military Personnel Command (NMPC 121D), Washington, D.C. 20370.

Individuals should specify which forms they are requesting: NAVPERS 1750/7 (application for scholarship program), NAVPERS 1750/9 (high school and college transcript request), or NAVPERS 15003-L (The Scholarship Pamphlet).

## Korea bases sprout stingers

Osan and Kunsan in Korea are the first two bases in the Air Force to put the "sting" back into air base defense. A new lightweight, shoulder-fired, heat-seaking missile system called the "Stinger" became operational at the two bases June 1. The stingers are being used by Osan's 51st and Kunsan's 8th Security Police Squadron to protect the bases from low-flying, high-performance aircraft.



# If you can't stand the

story and photos by  
Tracy L. Tanner

Looking back through time for famous military men, many names come to mind. But looking back for famous military cooks, chances are that one will end with a big blank—unless cartoon characters can be included. If so, Cookie in the Beetle Bailey comic strip is as famous as they come.

Poor Cookie, day in and day out, hears the same complaints, "What is this stuff? You call this soup?" But, despite the complaints, Sarge's belly continues to bulge and Beetle and his gang keep coming back for more.

Cookie doesn't stand alone. Cooks, or subsistence specialists as they are known in the Coast Guard, endure much of the same harassments.

"If you can't take the heat," jokes Chief Petty Officer Ed McKeventy, a subsistence specialist stationed at the Coast Guard Support Center in Elizabeth City, N.C., "well, you know the rest. Seriously though, our cooks do receive a bit of jiving from the men, but it's mostly light-hearted. I tell them not to be bothered by it. But, sometimes they take it personally.

"We can't expect to please everyone, especially when there

may be 200 people dining with us. We just do our best."

Doing their best means reporting for work at 5:30 a.m. and leaving after 7 p.m.

"We have two watches," explained McKeventy. "Each watch has five cooks and a watch captain. The watches alternate every two days. It may sound like an easy job," he

cooks prepare to tackle any assignment.

Training begins with a lab phase where instructors familiarize students with utensils, and teach them how to convert recipes.

"The Coast Guard uses a system called progressive cooking," McKeventy said. "The basic recipes feed 25 people. It's

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**We may live without poetry, music and art;  
We may live without conscience, and live  
without heart;  
We may live without friends; we may live  
without books;  
But civilized man cannot live without Cooks.  
Lucile (1860)**

---

added, "but believe me, after working 28 hours in two days, they deserve a break."

Subsistence specialists' work hours and work load vary according to assignments. A cook at Elizabeth City feeds hundreds of hungry mouths, whereas a cook on an 85-foot cutter may serve 15. But, the cook on the cutter is usually the only cook on board. He prepares the meals, procures the supplies and plans the menu.

Whether on land or at sea, feeding the Coast Guard is no easy task. Through a 13-week course at the Coast Guard Training Center in Petaluma, Calif.,

up to subsistence specialists to convert the recipe to fit the number of people eating."

Next, the students study baking. For two weeks they receive instruction on yeast raised products, cakes, pies, cookies and quick breads. Because they sample their efforts, bake shop remains a favorite phase of training.

Two weeks of sanitation precede the final training phase. For five weeks, students work alongside experienced cooks in the galley. Each experiences first-hand the different phases of preparing various food products.

# heat . . .

By the end of the phase, all possess a basic knowledge of food preparation.

The galley phase completes the course and marks the beginning of a career as a Coast Guard subsistence specialist. Those graduating in the top ten percent choose their next duty assignment.

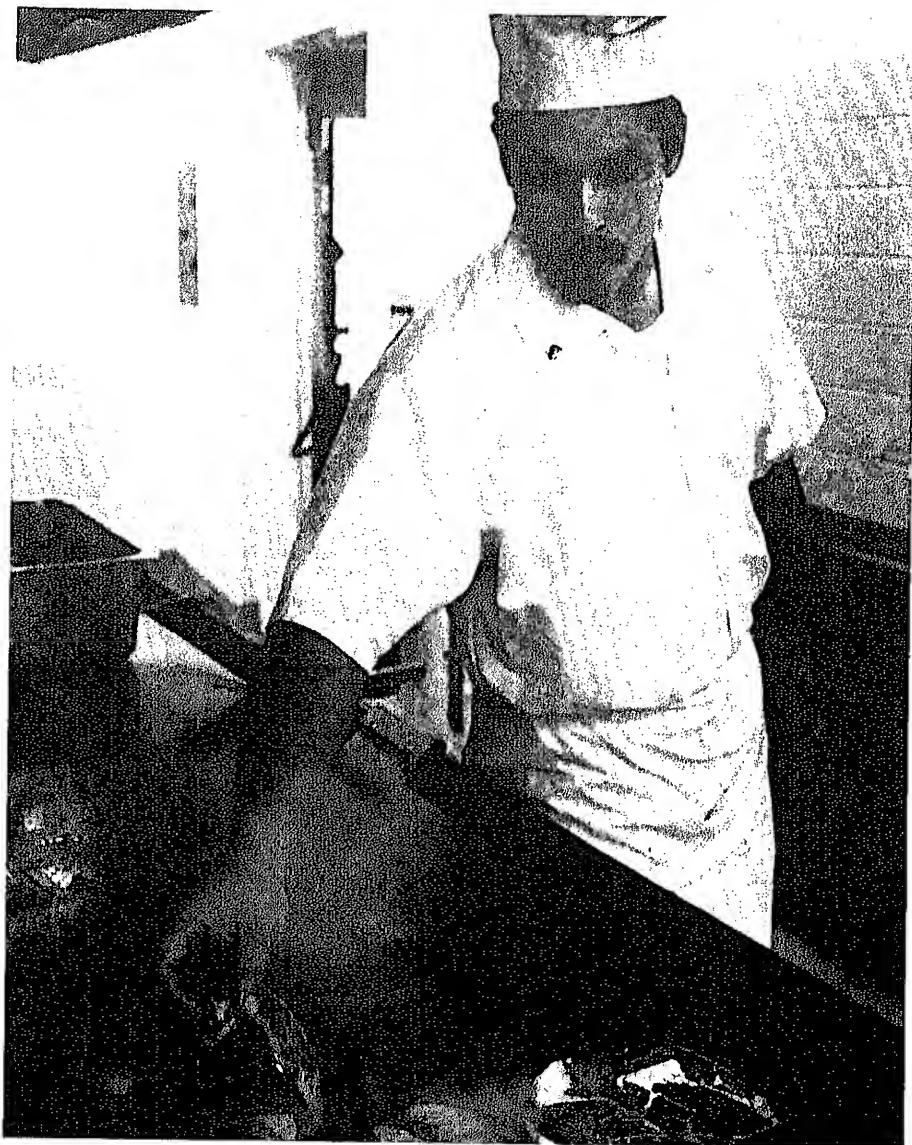
Although the formal schooling has been completed, the new subsistence specialist lacks the on the job training needed to run a galley. At their first permanent station, experienced cooks take the novices in hand and teach them everything required to operate a dining facility smoothly.

Coast Guard subsistence specialists may never reach the fame of Cookie, but like Cookie, they may expect some light-hearted ribbing. The work load seems immense at times, but so does the satisfaction each cook feels after preparing a meal.

Whether feeding 200 or 15, subsistence specialists take the heat and return to the kitchen each day, ready to prepare tasty, nutritious meals for their hungry shipmates.

(Above) A Coast Guard subsistence specialist prepares Delmonico steaks for the noon meal at the Coast Guard Support Center in Elizabeth City, N.C.

(Below) Sr. Chief Bert Palis samples the soup of the day.





## Navy uniform history

The Navy's enlisted jumper uniform has a history spanning more than 200 years. Changes to the uniform have evolved because of the need to protect its wearer against the elements, to make it practical for wear in shipboard surroundings, to create distinction among specialties, and to give the sailor a nautical appearance.

Whether the stories explaining the changes are based on facts, myths or old wives' tales is anyone's guess; it depends on whom you talk to.

The following is a brief

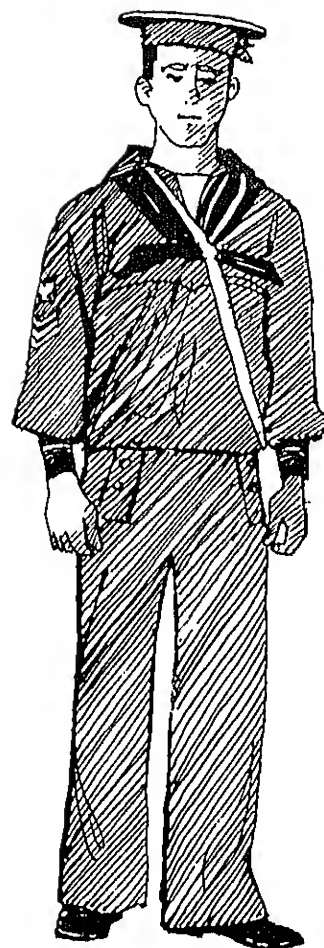
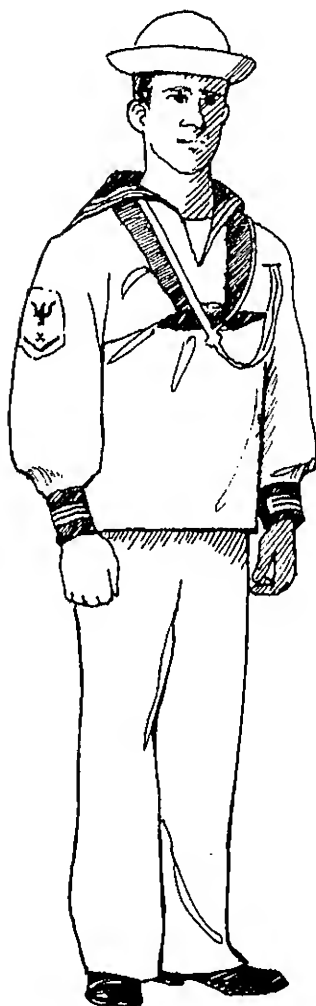
description of the uniform and the reasons for its development.

### The jumper

The jumper was originally designed with a separate collar made from leather or heavy sail canvas. The collar was to prevent "tar" from soiling the jumper. Back in the days of wooden ships and iron men, sailors pulled their hair back into a ponytail and applied tar to it. This practice protected the neck and shoulders from sword slashes.

The neckerchief was the forerunner to our modern "battle dressing" and doubled as a sling, or when unfolded, as a handbag for personal belongings. It's rumored that the neckerchief's black color was used because it didn't show the dirt. Myth has it that the black color represented the mourning of British Lord Nelson's death in the sea battle of Trafalgar.

The piping and stars on the collar and piping on the cuffs served various functions. In the early American Navy, it was used to identify specialties. For example; three rows of piping for petty officers and one row for landsmen and boys. An old wives' tale indicates the piping represents our three branches of government—executive, legislative and judicial. Scuttlebutt from the Royal Navy has it that the three rows of piping were modeled after their uniform and represents Lord Nelson's three famous sea victories. But as far as the U.S. Navy is concerned, there's no foundation to this rumor. The British also claim the stars on our jumper represent the king and queen. In northern Europe, young children go to extreme lengths to touch the stars on the jumper. It's supposed to bring good luck.



### Bell bottoms

Bell bottoms have been traditional attire since men and ships have gone to sea. The flare was designed into the trousers for several reasons—for ease in rolling up pant legs when wading ashore or when scrubbing decks, for ease in kicking the trousers off in the water, and for use as a life preserver.

### Headgear

Headgear of the "Old Navy" was a canvas hat quite similar in appearance to our white hat of today. It was used as a pail to carry water, to bail out a boat, or as an emergency float for a man overboard. Rolled down, the hat protected sailors from the sun and elements.

# NBC Defense

story by Dave Marriott  
photo by Rob Jackson

## NBC.

For most Americans, these letters have a single meaning. They identify one of the country's oldest and largest radio and television networks. But to Marines, these letters have a dire meaning. A meaning so frightening, they'd rather hear about it than experience it. The meaning? **NUCLEAR, BIOLOGICAL, AND CHEMICAL WARFARE.**

"The United States has a stringent policy on NBC use," said Staff Sgt. J. C. Bogardus, an NBC Defense Specialist at Marine Corps Base, Camp Lejeune, N.C. "Nuclear—no first use; chemical—no first use, but we reserve the right to retaliate in time and scope; biological—no first use, but again, we reserve the right to retaliate in time and scope. 'In time and scope,' plainly put, means if an adversary employs chemical or biological warfare against us, we may retaliate using the same methods.

"But just because our country has strict rules governing the use of NBC warfare, doesn't mean others do," he continued. "So the Marine Corps has NBC defense specialists to train infantry divisions and aircraft wings about NBC countermeasures."

"We cover the entire scope of NBC defense," said Staff Sgt.

John Luckey, the NBC training noncommissioned officer for the 2nd Marine Division. "From establishing a control center and forecasting the fallout area to command responsibility and individual protective measures.

"And when I say command responsibility, I'm not talking just the officers and senior non-commissioned officers," he continued. "I'm talking platoon, squad and fire team leaders."

**Division NBC defense** specialists train two subordinate control centers a month.

"Having a well-trained control center is vital to any NBC defense program," said Sgt. Todd Middleton, a member of the 2nd Marine Division's NBC control center training team. "Marines at the control center plot fallout according to wind data and the size of the weapon. In case of chemical or biological attack, they plot the fallout using the same theory, except temperature, humidity and precipitation have to be considered. Once a fallout area has been established, they're able to give field commanders an idea of when units can be taken into a contaminated area and survive."

While having a knowledgeable control unit is vital, instructors stress individual protective measures when training a unit, because according to Bogardus, "that's where we'll save the most lives."

**All Marines receive** classes on the field protective (gas) mask, and how to wear MOPP

(Mission Oriented Protective Posture) gear.

"A lot of Marines grumble when they have to sit through these classes every year," Bogardus said. "But if they don't know how to get their mask and protective clothing on quickly at the first sign of attack, they might as well forget it. Chemicals can take effect that fast."

They also teach units which procedures to follow to decontaminate vehicles, weapons and clothing.

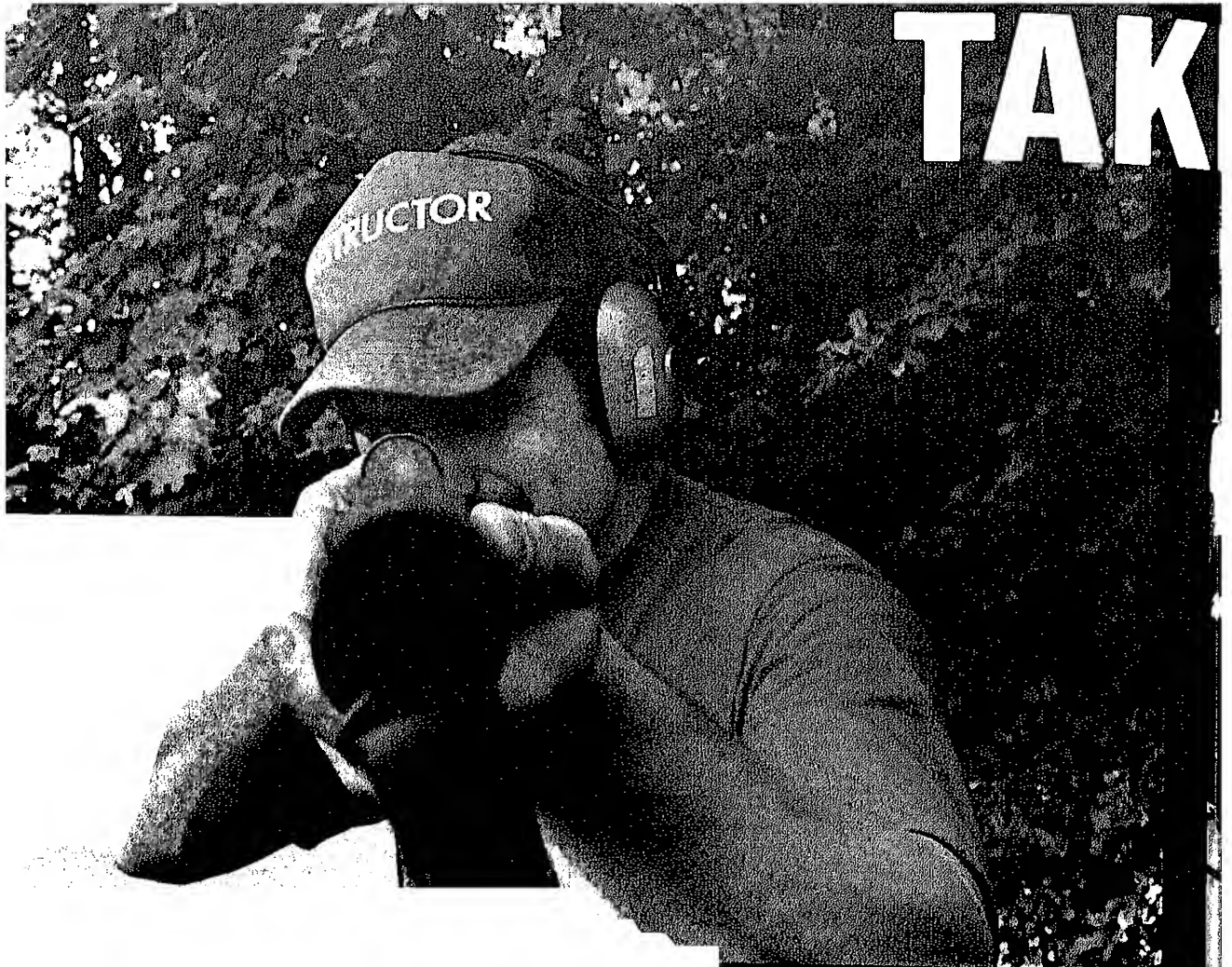
"After the classroom training is over, we test them in practical application," Middleton said. "For example, we simulate a nuclear explosion's noise and flash by igniting a 55-gallon drum filled with aviation fuel and dynamite.

"The exercises are comprehensive," he continued. "The unit does everything from radioing in a nuclear, chemical or biological attack warning, to sending in a monitoring team and posting the contaminated area with signs."

"Working as an NBC Defense specialist is interesting," Bogardus said. "It's a pioneer field, there's always changes, something new to learn.

"And there are other advantages," he continued. "Since the field is relatively new, it's wide open, there's room for advancement.

"But what I like most about it is the job satisfaction," he concluded, "knowing the impact I can have on combat—the lives that I can save."





# E AIM

story and photos  
by Tracy L. Tanner

When asked what the job of small arms range instructor has done for him, Petty Officer 2nd Class J. D. McBroom points to the gray hairs peppered about his head. "This," he jokes. "Seriously though, I've talked with a lot of people since I've been working at the range. And any time you talk with a lot of people, you learn a lot about people and life in general."

McBroom has been an instructor for five of the eight years he's served in the Coast Guard. Two years ago, he received orders to the small arms range at the Coast Guard Reserve Training Center in Yorktown, Va.

As a gunner's mate, McBroom's expertise encompasses an assortment of weapons, from small arms to 5 inch cannons. Fulfilling his range duties requires him to share his expertise, teaching Coast Guardsmen basic marksmanship on the 12 gauge shotgun, .45 pistol and M16 rifle.

On any given day, McBroom and the other range instructors may have 30 Coast Guardsmen qualifying with their weapons. "Sometimes this range gets pretty crowded," he explained. "That's why we stress weapons safety continuously."

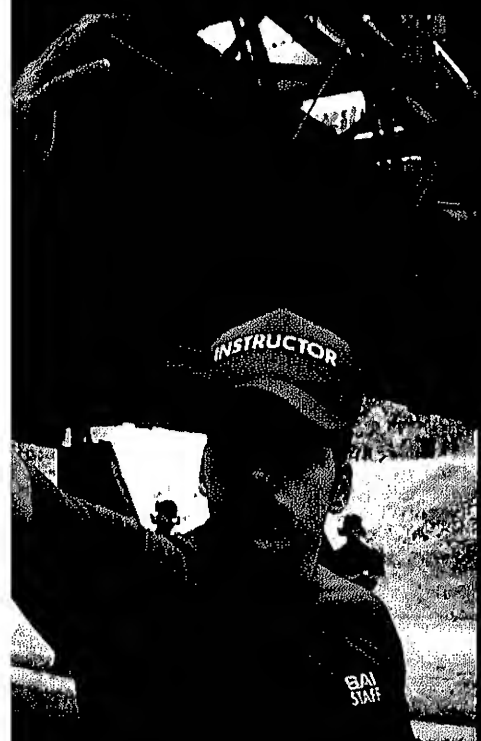
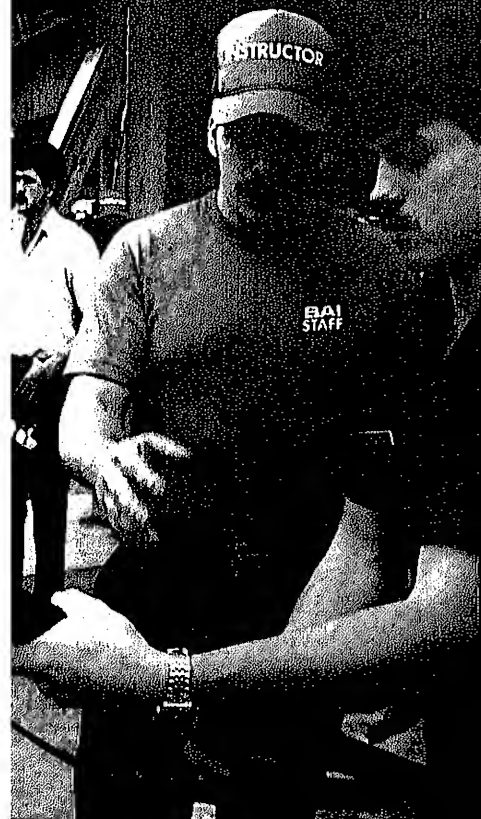
The instructors have a univer-

sal language that helps keep the range running smoothly. The instructor on the control platform gives the command "commence firing." But, before he can give the command he must receive an "okay" signal from each firing line instructor.

"We are a team," said McBroom. "I trust the instructor next to me to ensure his student does everything by the book, and he trusts me to do the same. That's what makes a good range crew . . . trust. We must have a good team here. I trust them all."

So, why the gray hairs? "Sometimes, students get frustrated when their weapons jam, and turn to me for help," he explained. "That's great, except when they turn, they're usually pointing a loaded weapon. This is when I use the range instructor's most important quality . . . patience. Instead of going crazy, I suggest the person point the weapon down range, and then we'll clear the malfunction."

"But, other than the moments my life passes before my eyes, the job is great," he continued. "I work outside, so I'm never stuck behind a desk. Even when the temperature hits below zero, I'd rather be out here doing what I enjoy most—teaching people. And besides, the gray hairs would have come sooner or later anyway," he concluded.



# METAL BENDERS

story and photos by Dave Marriott

"If it's bent, broken, smashed or crashed, we can fix it," said Sgt. A. Figueroa, a structures mechanic with Marine Medium Helicopter Squadron 162 at Marine Corps Air Station (H), New River, N.C. "It may take a few days to complete, but as long as most of the helicopter's original airframe is intact, we can make it look new."

Marine Corps helicopter structures mechanics inspect, maintain, and repair helicopter structures and structural components.

"Basically, we do the same work as auto body mechanics, except on helicopters," Figueroa said. "We paint the craft, apply its identification decals, change windows, repair skin dents and replace damaged airframe sections."

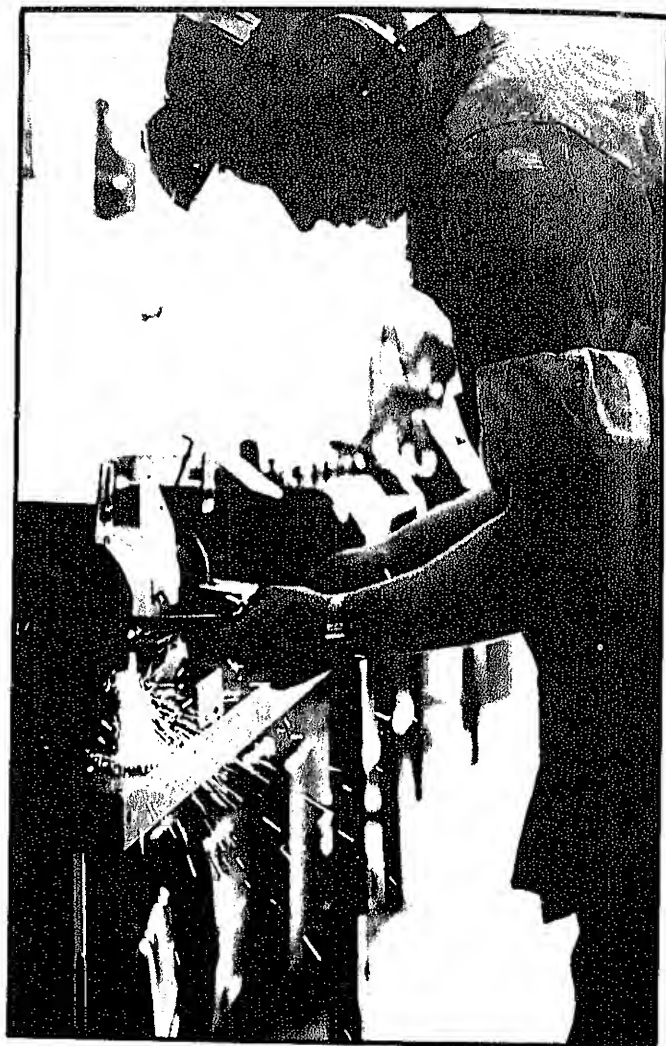
But unlike auto body mechanics who order parts from a warehouse, structures mechanics manufacture most of the parts they replace.

"Making windows is one of the simpler jobs," Figueroa said. "We measure the window, cut a plexiglass replacement piece, and install it."

"But all parts aren't that easy to make," he continued. "Manufacturing body panels and airframe ribs requires a combination of mind and muscle."

"Body panels and ribs won't match if they have the same bend angle," explained Figueroa. "So before we manufacture a panel or rib, we determine its bend radius."

Structures mechanics compute the bend radius using various mathematical formulas. Once they find it, they refer to repair manuals and determine which metal quality the part requires.



Sgt. A. Figueroa, a helicopter structures mechanic, grinds down the top of a brace. Marine structures mechanics manufacture many of the parts they replace on helicopters.

"The Marine Corps uses three aluminum types; SO, a soft, pliable grade, and two harder grades T3 and T6," said Figueroa. "SO is easily shaped, but working with the harder grades can be tricky. If you bend them too far, they'll crack under stress."

In addition to replacing body panels and airframes, helicopter structures mechanics replace fuel cells (gas tanks), repair chipped rotor blades, stub wings (wheel assemblies), basic flight controls, and ventilation systems.

"The worst duty we have has to be replacing fuel cells," Figueroa said. "The cells are self-sealing, rubber tanks, covered by aluminum shells. Once you remove the cell from the helicopter, there's nothing repairable inside, you just replace the entire unit."

"But the job seems to take forever," he continued. "Those things must be attached with 1000 bolts and screws."

"Repairing the ventilation systems is another



tedious job," Figueroa added. "Using schematic drawings, we trace the helicopter's ventilation systems until we find a blockage, leak or crack. Once we find it, we remove the malfunctioning section and install new tubing."

Each time a helicopter logs 100 flight hours, structures mechanics perform a detailed phase inspection.

"During phase inspections, we check everything," Figueroa said. "And quite often, we find a 'downer.'"

"A downer can be anything that renders a helicopter a safety hazard," Figueroa explained. "It could be a major blade repair or a simple clam shell latch.

"Clam shells are access doors on helicopter roofs," Figueroa continued. "Two latches and a safety strap secure them. If a latch breaks, the aircraft must be downed. Theoretically, if the remaining latch or safety strap broke during flight, the doors could open and foul the rotor, causing the helicopter to lose power and crash."

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**"Occasionally we'll find surface corrosion. If we find anything worse, we know someone isn't doing their job."**

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And according to Figueroa, "it's usually the small pieces of common hardware that down a craft.

"One of our more important jobs often determines a helicopter's life span," Figueroa said.

"Our section supervises the squadron's corrosion control program. Every 28 days we check each and every compartment and component for rust.

"Occasionally, we'll find some surface corrosion," he continued. "If we find anything worse, we know some section isn't doing their job.

"A couple of times, in helicopters we've received from other squadrons, we've found metal corroded so severely it turned to powder," he added. "But, both times it was in compartments which are hard to see, let alone reach."

Helicopter structures mechanics receive 15 weeks of training prior to reporting to their squadrons. They attend a three-week class on aviation fundamentals, followed by a 12-week

Sgt. A. Figueroa and Cpl. Stephen Espigh, both structures mechanics with Marine Medium Helicopter Squadron 162, tighten bolts on a CH-46 helicopter. CH-46s have doors on their roofs, giving mechanics easy access to many of the craft's controls.

aviation structural mechanics course.

The second course combines classroom and hands-on instruction in basic tool and hardware usage. Students study drawing interpretations; drilling, riveting; stressed skin; internal structures; corrosion control and aircraft control systems. Prior to graduation, instructors grade students on projects they manufacture.

"The instructors grade hard," Figueroa said. "A tiny tool mark or scratch could subtract 15 points off your grade.

"Their grading system seemed unfair until I reported to my first squadron," he continued. "Once I started working on multi-million dollar aircraft, I realized that tool marks are no joke. The slightest mistake could cost the government a bundle, or take a life.

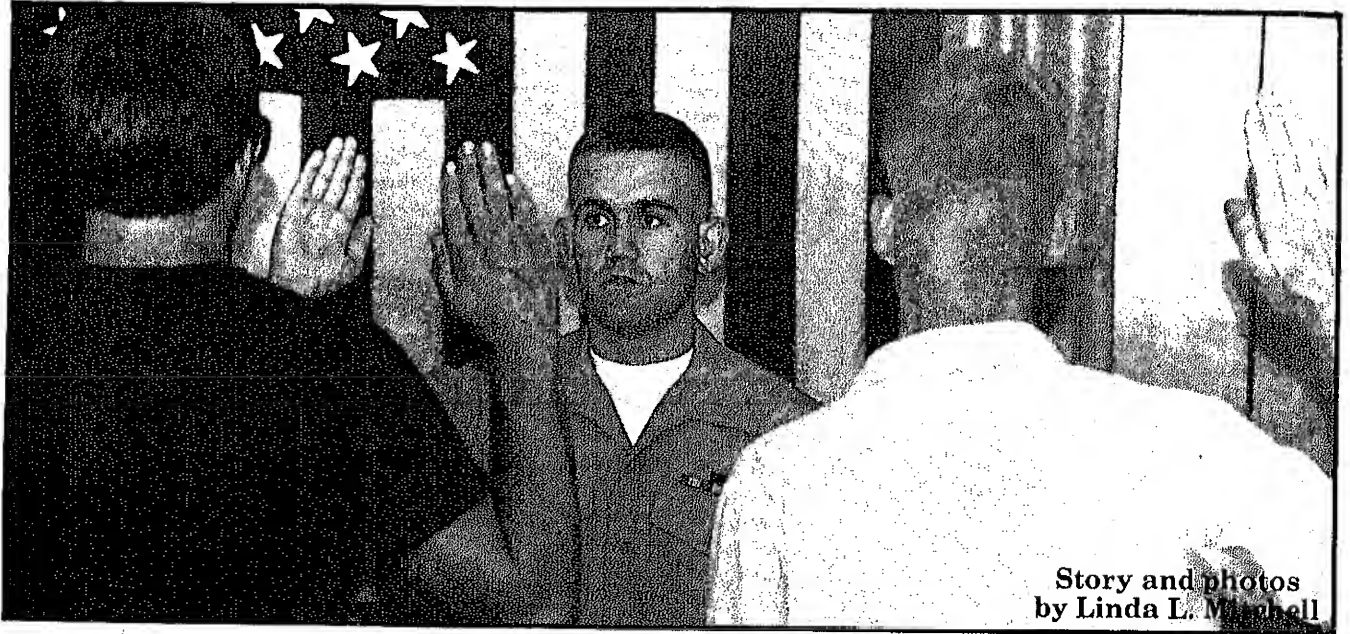
"I like the job I'm doing in the Marine Corps," Figueroa said. "I've got responsibility, promotions are good, and the people I work with are professional.

"But versatility is probably the job's best aspect. Should I decide to return to civilian life, I can use my Marine Corps training anywhere in the world, to repair anything—cars, homes, boats, even air-conditioning units.

"The possibilities are unlimited," he concluded.



# *The road to military service*



Story and photos  
by Linda L. Marshall

**"I, (name), do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to regulations and the Uniform Code of Military Justice. So help me God."**

By the time young men and women raise their right hands and repeat the oath of enlistment, they have completed a multitude of processing stages. Among the most important are those at the Military Entrance Processing Station (MEPS).

The mission of MEPS is to administer medical and aptitude tests to prospective Army, Air Force, Navy and Marine Corps recruits.

"We are a Department of Defense jointly-staffed command," said Army Maj. Glenn Hodge, commander of the Richmond, Va., MEPS. "The individual stations are commanded by different services, with the Army acting as the executive agent over all of them.

Each station has representatives from each branch processing their service's applicants."

The Armed Forces Vocational Aptitude Battery (ASVAB) test is administered at local high schools and regional MEPS sites. The test results, along with identification information on each person, are forwarded to MEPS for filing until an individual reports for processing.

Applicants usually arrive at the MEPS the night prior to processing. Each station provides the applicants with hotel accommodations, food and transportation.

"We know in advance who's coming, so we can pull each person's file and prepare a jacket containing blank enlistment

contracts and other documents necessary for enlistment," Hodge said.

Following the station commander's welcome aboard briefing, applicants split into two groups—those joining the Delayed Enlistment Program (DEP), and those leaving the DEP for basic training.

**Applicants reporting for active duty** are given a physical prior to completing enlistment procedures. MEPS medical personnel ensure medical problems have not developed since the initial physical, and previously-identified problems have been corrected.

**"After completing the enlistment process,** recruits entering active duty are given a thorough

transportation briefing; where they're going and how they'll get there," Hodge said. "We also give them specific instructions on making transportation connections, and a list of emergency phone numbers should they get in trouble or miss a connection.

"The entire briefing is fairly comprehensive," he added.

Most recruits are processed into the DEP. This allows them to prepare for active duty mentally and physically, and gives the services enough time to receive the applicant's training slot.

The length of time in the DEP depends on the job requested. Generally the waiting time is between a couple of weeks and a year. A few applicants process for active duty the same day their physical is completed.

Men and women enlisting in the DEP take a full physical examination. The exam, which takes three to four hours to complete, includes a chest x-ray, and hearing, vision, blood and urinalysis tests. Applicants are also checked for color-blindness and given an orthopedic exam.

Because certain jobs call for the ability to lift heavy objects, applicants must be able to lift 70 pounds. The MEPS has a machine which tests the applicant's ability to lift this weight.

After completing the physical, applicants interested in officer training programs and career fields requiring special knowledge and abilities are administered a special series of tests.

Once the aptitude and physical testing is complete, applicants see their respective service liaison. The liaisons fill out service-unique enlistment forms and determine which jobs an individual qualifies for.

The Army, Navy and Air Force liaisons place applicants in specific jobs. "In a sense, we are 'employment agency' guidance counselors," said Master Sgt. Jerry Prather, the Army senior counselor.

"We enter all the applicant's pertinent information into a computer, including medical, mental and personal desires,"

said Master Sgt. Tony Tinsley, the senior Air Force counselor. "The computer lists all the jobs the applicant is qualified for, and which jobs have openings. Our ultimate goal is to satisfy both the individual and the service's needs," he added.

**The Marines** are the exception to the "specific job" rule. "Once applicants have their test results, we place them in a guaranteed career field, such as mechanical, electrical, automotive or computer operations," explained Staff Sgt. Butch Guillot. "But these fields are broken down into numerous jobs or military occupational specialties (MOS)—heavy equipment repairman, computer programmer or computer maintenance technician—which we can't guarantee.

"However, if an individual

enlists for six years, versus the normal four, we can guarantee them specific jobs," Guillot added.

Once an agreement is reached on a job, the applicant begins final processing. Fingerprints are taken and attached to a security clearance request which is mailed to the FBI in Washington, D.C. Next of kin and casualty forms are filled out, and the enlistment contract is typed including term of enlistment and any guarantees.

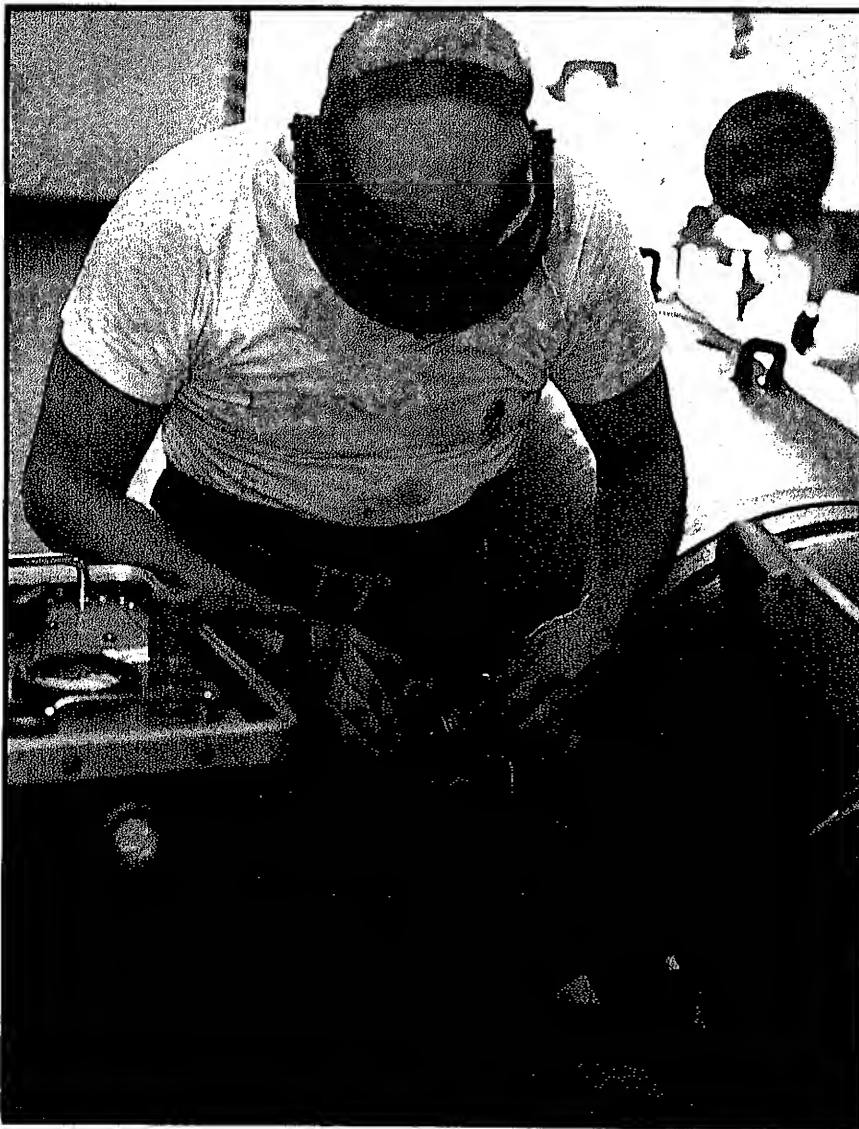
**Then comes the final step.** Families are invited into the ceremony room to watch. Applicants enter, raise their right hands and solemnly swear (or affirm) to defend the United States and its Constitution "against all enemies foreign and domestic."



An applicant for military service tests his upper body strength on a weight lifting machine at the Richmond, Va., Military Entrance Processing Station (MEPS). All applicants must be able to lift a minimum of 70 pounds.

# MINEMAN

story by Eric Berryman  
photos by Doren Smith



A Navy mineman tests the instrument rack and installs an arming device in a mine.

A few technical jobs in the Navy demand a cool head and a surgeon's dexterity. Other important qualifications include steady nerves and a load of common sense.

These occupations deal with mines and explosives, and take a special kind of person to meet the challenge.

Mines of today are far removed from the round and floating "porcupine" devices of World War II. Although the purpose for which mines were invented (to prevent an enemy from using his harbors and shipping lanes) has changed little over the years, modern engineering has created an entirely new system of awesome power.

Depending on the type, and the depth at which they are placed, some mines are mighty enough to raise a 70,000-ton ship three feet in the air and break its back. They can be delivered to targets by surface ships, submarines and aircraft. Triggers can be set to explode by sound waves (acoustic), by the metal hull of a nearby ship (magnetic) or by the force a ship creates simply by passing nearby (pressure). Some use all three trigger devices or any combination of the three.

Seaman David R. Thurman, a mineman stationed with the Mine Assembly Group, Charleston, S.C., works with these large, powerful underwater bombs.

Mines can be tricky. However,



Thurman is quick to stress that the dangers are minimized by a multitude of safety procedures. Safety is emphasized constantly.

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**"I like working with my hands," he said. "I'm not the book type. This job gives me the chance to work in the way I like best."**

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Thurman must demonstrate an aptitude for electricity, electronics and general mechanical skills. He needs to know about voltage and batteries to regulate the amount of current flowing from one element to another. Electronics come into play because some components have computer parts; and he must be adept with mechanical aids like hoists and pneumatic tools. His

inventory of skills also includes paint brushes and sanders, because mines must be kept clean and sleek.

After graduating from Shady Springs High School in West Virginia, Thurman worked in a warehouse. It was a good living but lacked a satisfactory future.

In late 1982, he graduated in the top 10 percent from Navy recruit training, earning him the privilege of choosing his trade. As a candidate in the four-month-long Mineman "A" School in Charleston, besides classroom instruction and examinations, he was rigorously tested on psychological toughness.

The ability to withstand high stress is an absolute requirement for anyone in this field. Minemen undergo a lot of strain during buildups when mines are assembled for possible use. The work demands long hours, few breaks and the most exacting attention to detail. One cable left

unconnected, for example, may mean that the mine is a dud—and an enemy ship could pass over it.

If he remains in the Navy in his present occupation, Thurman can expect more education in Mineman "C" School, digging deeper into the fields of advanced electronics and mine war technology. If he decides to leave the service, he will be eligible for employment in government or private industries associated with weapons and ordnance.

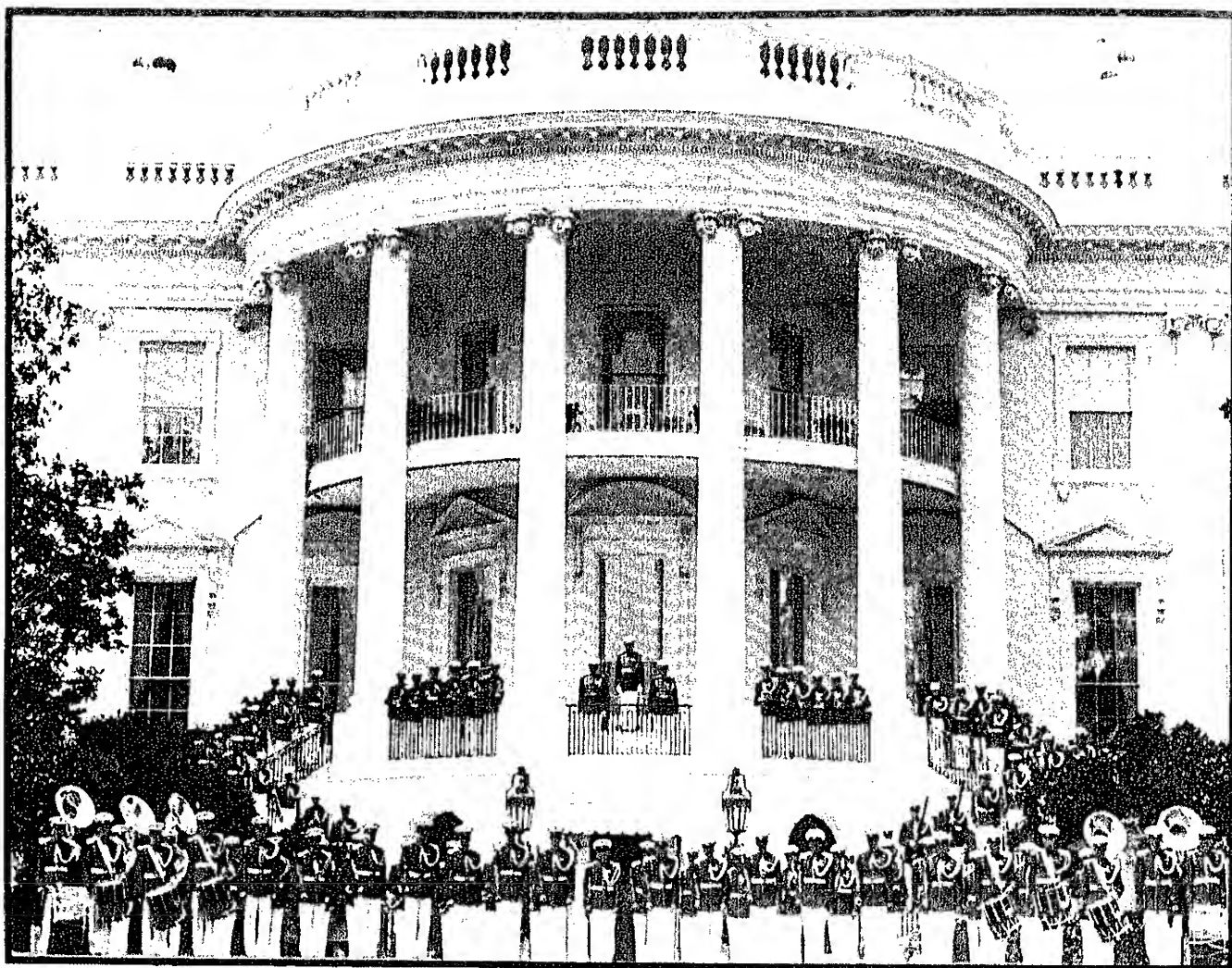
Meanwhile he is a respected junior member of an elite group of highly trained specialists. "The command is special," said Thurman, who is now looking forward to another trip abroad, this time to the Greek island of Crete.

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**A Navy mineman straps down an instrument pack and connects a cable to an MK 42 hydrostatic switch, explosive driver.**







story by Dave Marriott

# A CAPITAL DUTY ASSIGNMENT

Washington, D.C.'s beauty, history, and prestige seem to inspire awe in everyone, visitor and resident alike.

Since 1790, when Congress approved the site selected by George Washington, the city's fame and reputation as the heart of freedom has grown worldwide.

However, for most Americans, the 69 square mile city represents the federal government's home.

Of the over one million people in the D.C. metropolitan area (including the northern Virginia and Maryland suburbs), more than a third are government employees. Approximately ten percent of these are active duty military members, stationed at one of the 13 installations scattered throughout the area.

Although the bases represent each of the five services and a

## WASHINGTON, D. C.

The United States Marine Band, acclaimed as "The President's Own," was established by an act of Congress on July 11, 1798, and is the oldest military band in the United States.

variety of commands, among the units most closely associated with Washington are the Army's "Old Guard" and the Marine Corps Silent Drill Team, as well as the various military services' bands.

Both advantages and disadvantages accompany being stationed in the nation's capital. While many of the bases have large single and family housing areas, some have little or none. For married and single members, this may mean living off-base, which can be quite expensive.

Yet no matter where you live, there's always extensive morning and evening traffic. If a person doesn't mind riding the bus, the subway or joining a carpool, the transportation problem becomes manageable.

For most, the advantages far outweigh the disadvantages. Although Washington is small compared to many of the country's major metropolitan areas, it abounds with off-duty recreational activities.

The city is a smorgasbord for residents and tourists. The nation's story lines practically every street. Tributes and statues of famous Americans decorate the intersections of the city's avenues and boulevards.

History buffs can walk along the Mall, visiting the Lincoln, Jefferson, and Washington Memorials; or cross the river into Virginia and tour the Robert E. Lee Mansion, Tomb of the Unknown Soldier, or Marine Corps Memorial.

Other historic attractions are peppered throughout the city—like the Old Ford's Theater, the site of Abraham Lincoln's assassi-

nation, or the National Archives which stores and displays all the country's records.

Persons curious about the way bureaucracy works can visit more than 20 major government agencies, including the State Department, Federal Bureau of Investigation and Department of Agriculture.

Or, after viewing a session of Congress, they may want to follow the printing operation of paper currency, government bonds, and postage and revenue stamps at the Bureau of Engraving and Printing.

For those interested in the arts, Washington is a gold mine. The Smithsonian Institution alone houses seven museums. The National Gallery of Art and the Freer Gallery, world renowned for their extensive collections, are located downtown. Others may prefer to attend a play or opera at the Kennedy Center.

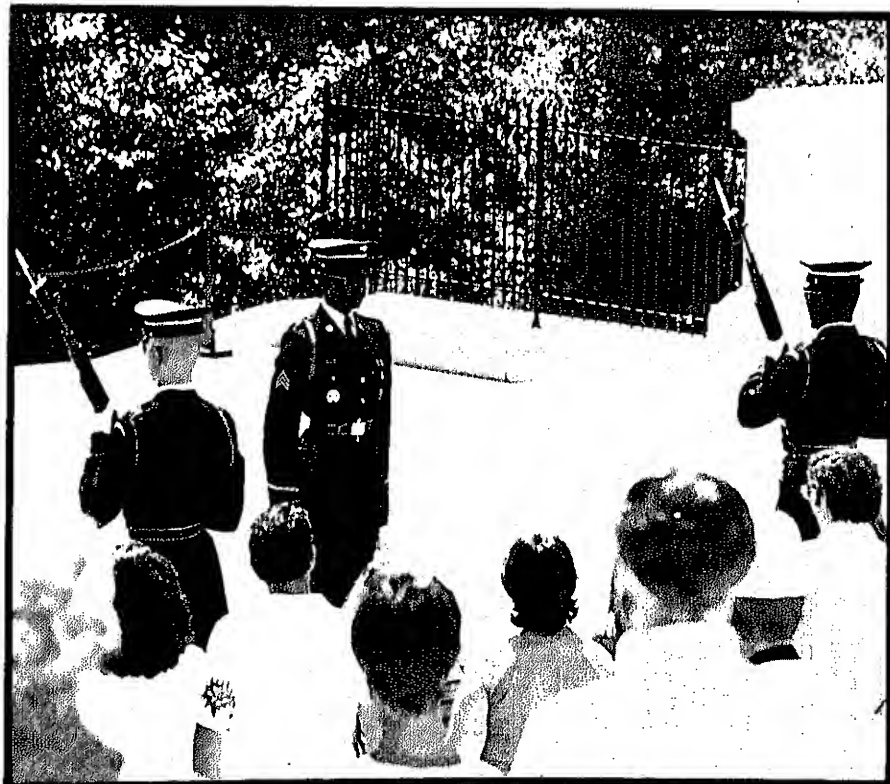
The city hasn't forgotten sports enthusiasts or outdoorsmen either. It hosts professional

football, basketball and hockey franchises. If swimming, fishing or canoeing seem more exciting, the Chesapeake Bay and Potomac River offer excellent playgrounds for all three.

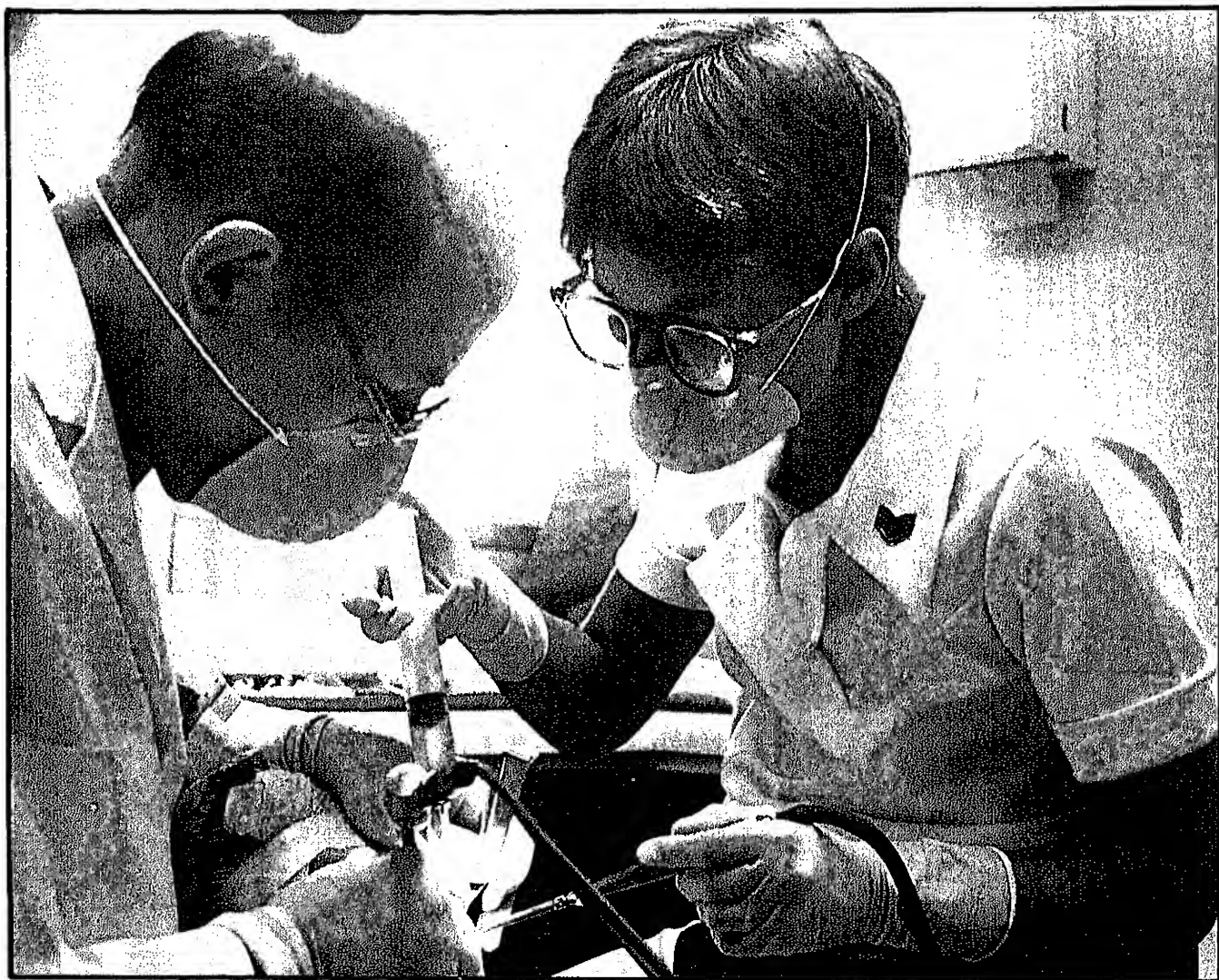
Even the weekend relaxer has a spot in the city's social life. Many travel to downtown Washington just to lie around the Mall's reflecting pool, enjoying an afternoon rock or jazz concert. Others take the family and spend a day at the zoo, or dress up for an evening out in the elegance of historic Georgetown.

Whether sightseeing, fishing, swimming or touring a museum fits one's fancy, most military members will definitely agree, Washington, D. C. is a "capital" duty assignment.

Members of the Army's "Old Guard" perform a "Changing of the Guard" ceremony at the Tomb of the Unknown Soldier in Arlington National Cemetery.



# Defenders with a difference



Staff Sgt. Susan Sparrow assists Col. (Dr.) Rodney C. Dukart, chief of oral surgery in the Langley dental clinic.

Story and photos  
by Linda L. Mitchell

They don't wear camouflaged clothing, nor carry guns, but they do help wage daily battles of deterrence. They are Air Force dental assistants and dental laboratory technicians, who help ensure servicemen's mouths, teeth and gums are healthy and ready for action.

Airmen in both career fields attend the School of Health Care

Sciences at Sheppard Air Force Base, Wichita Falls, Texas. While locations are the same, and the field of study is similar, the work in these two career fields differ immensely.

Dental assistants spend nine weeks learning several aspects of dentistry including x-ray, anatomy and physiology, the use of dental equipment, teeth cleaning and the procedures for assembling a dental record.

With this knowledge under

**Senior Airman Laurette Eady prepares a denture mold in the Langley clinic laboratory.**

their belts, students get to practice their trade in one of the school's small clinics under the watchful eye of the instructors.

"We learned to follow a dental case from beginning to end, working on actual patients," explained Senior Airman Karen Goodnough, a dental assistant in the Langley Air Force Base, Hampton, Va., dental clinic.

"Working in the clinic was the best part, because we were able to get in there and do the work," she added.

Dental assistants' duties include preparing instrument trays, anaesthetic needles and mechanical equipment the dentist will need during treatment. They also prepare the patient and hand the dentist his or her working tools.

In preventive dentistry (cleaning and scaling teeth), dental assistants provide direct patient care. Otherwise, they simply assist the dentist.

Dental lab technicians, also assist dentists, but not in direct patient treatment.

During their six month training, they learn the creation of prosthetics—full and partial dentures, bridges, crowns and other artificial devices. Dental lab technicians receive some anatomy and physiology training, plus instruction on keeping a gold record (the amounts of gold used to make dentures). They also receive hands-on experience in laboratory conditions.

"Often the dentist will invite us into the treatment room to see what our work looks like, but I don't like to look into the patient's mouth," said Senior Airman Laurette Eady, a dental lab technician in the Langley dental clinic.

The difference between the two career fields is that dental assistants work directly with the patient and lab technicians don't.

"In both courses, time allows instructors to touch lightly on all



specialty areas, giving students the basics," said Staff Sgt. Susan Sparrow, who assists in Langley's oral surgery section.

"The hard core instruction begins at permanent bases after graduation from the school."

After being assigned to an on-the-job instructor, lab technicians work in an Air Force dental laboratory. Dental assistants train in one or more of the other sections in the dental clinic, including the front desk, general restorative dentistry (drilling and filling), x-ray and endodontics (root canal therapy). Dental assistants could also be assigned to specialty areas such as periodontics, where clinic personnel study and treat gum diseases; oral surgery or preventive dentistry.

While airmen are in training, an on-the-job training record is compiled which goes with them wherever they are assigned. This record, plus experience gained during basic training, technical school, advanced Air Force training and off base college study, can add up to an associate degree in health care sciences through the Community College of the Air Force.

With the exception of the preventive dentistry program, the courses for dental assistant and dental lab technician are accredited through the American Dental Association.

When a front line defense against tooth decay is called for, people look to the airmen in white—dental assistants and dental lab technicians.